UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/743,653	12/22/2003	Juan-Antonio Carballo	AUS920030892US1(4021)	7580

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EXAMINER
NGUYEN, DUC M

ART UNIT	PAPER NUMBER
2618	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

	Application No.	Applicant(s)
Advisory Action ***Before the Filing of an Appeal Brief***	10/743,653	CARBALLO, JUAN-ANTONIO
	Examiner	Art Unit	
	Duc M. Nguyen	2618	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED <u>01 August 2007</u> FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☐ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

   a) ☐ The period for reply expires _____ months from the mailing date of the final rejection.

   b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

   Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

<u>NOTICE OF APPEAL</u>

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

<u>AMENDMENTS</u>

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will <u>not</u> be entered because

   (a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);

   (b) ☐ They raise the issue of new matter (see NOTE below);

   (c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or

   (d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

      NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).

5. ☐ Applicant's reply has overcome the following rejection(s): _____.

6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).

7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

   The status of the claim(s) is (or will be) as follows:

   Claim(s) allowed: _____.

   Claim(s) objected to: _____.

   Claim(s) rejected: *18-41*.

   Claim(s) withdrawn from consideration: _____.

<u>AFFIDAVIT OR OTHER EVIDENCE</u>

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will <u>not</u> be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).

9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will <u>not</u> be entered because the affidavit or other evidence failed to overcome <u>all</u> rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).

10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

<u>REQUEST FOR RECONSIDERATION/OTHER</u>

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: <u>see the attached "Response to Arguments"</u>.

12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). _____.

13. ☐ Other: _____.

Response to Arguments

1.   Applicant's arguments filed 8/1/07 have been fully considered but they are not

persuasive.

In the response filed 8/1/07, Applicant contends that

With regards to claim 18, the combination of Fung and Zeitler does not teach or suggest
"...communicating the power mode to the multiple links to configure circuitry associated with
the multiple links to process the data transmission."

The Office action draws equivalencies between elements of claim 18 and the cited
references, which contradict the language of claim 18, to form the basis for the rejection. For
instance, the Office action implies an equivalency between "multiple links" in claim 18 and
"multiple servers" in Fung. Fung describes the multiple-servers as "a plurality of servers,
including their CPU, hard disk drive, power supply, cooling fans, and any other circuits or
peripherals that are associated with the server.[2] "Server modules are operative to serve data or
other content in a manner that is well known in the art and not described in greater detail here."[3]

Furthermore, the equivalencies rely, in part, on the obviousness of application of the power
modes Fung describes in connection with servers to links but Fung does not apply the power

modes to links described in Fung. Fung describes switching fabric (switch modules) in FIG. 6 at elements
104a-1, 104a-2, 104b-l, and 104b-2 and does not teach or suggest implementation of power modes for
those links.
The present application clearly describes "links" as transmitter and receiver pairs including the
communications medium there between.[4] Claim 18 defines the "multiple links" as being "between an
origin and a destination of a data transmission .... " Claim 18 also describes "...a channel of the multiple
links ...." Consistent with this interpretation, Fung states that "[s]erver modules are operative to serve data
or other content in a manner that is well known in the art .... ,[5] Fung does not describe the servers as
links for a data transmission.The lack of equivalency is obvious if one were to substitute "multiple servers"
into the preamble of claim 18. In other words, Fung does not teach or suggest a "method for reducing
power consumption by multiple servers between an origin and a destination for a data transmission"
because Fung does not teach or suggest interconnecting "multiple servers" to propagate a data
transmission from an origin to a destination.
Fung describes changing the servers' power modes based upon the <u>loads on the servers.[6]</u> Fung does
not describe changing link power modes based upon <u>data transmission characteristics of a channel.</u> And,
Fung does not teach or suggest "communicating the power mode to the multiple links [between an origin
and a destination for a data transmission] to process the data transmission" between an origin and a
destination.

In response to applicant's argument that the references fail to show certain

features of applicant's invention, it is noted that the features upon which applicant relies

(i.e., "links" as transmitter and receiver pairs including the communications medium

there between) are not recited in the rejected claim(s). Although the claims are

interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). In this case, with the broadest reasonable interpretation, any data transmission (i.e, a control signal) would read on a link. However, since each server would comprise a transmitter and receiver pair (i.e, input/output ports) in order to transmit/receive a message such as e-mail messages, each of the transmitter or receiver would read on a link. Therefore, a server by itself would read on the claimed multiple links, and so does for multiple servers.

Further, as admitted by Applicant, Fung describes changing the servers' power modes based upon the loads on the servers and also on the activity, it is clear that Fung does describe changing link power modes based upon "the activity being related to a characteristic for a data transmission via a channel of the link" as claimed (see Fig. 10, ref. 320 and [0086, 0155-157]), noting that every data transmission require a channel for transmitting data. Also note that loads on the servers would also affect the signal quality of a channel (i.e, poor or good signal qualities based on signal strength, signal-to-noise ratio measurements are varied with loads on the servers).

Examiner's note : it appears that the specification refers the multiple links as links (i.e, hubs) connecting the original node to the destination node, not as transmitter and receiver pairs (i.e, a transmit/receive port is a link, not a multiple links).

Applicant further contends that

With regards to claim 25, the combination of Fung and Zeitler does not teach or suggest two ports (a first port and a second port) that receive a control signal that configures the first port to operate in a first power mode and the second port to operate in a second power mode.

The Office action refers to the rejection of claim 18 as the basis for claim 25. The Office action further states that each of the servers comprise "input/output ports" and:

...it is clear that Fung would teach a first port ...comprising a first link circuit to
couple to the first device (a first server) and a second port ...comprising a second
link circuit to couple to the second device (a second server) ... and would teach
global controller and local controller ....

Fung does not teach or suggest two ports having capabilities to receive the control signal
and in response thereto, to configure to operate in particular power modes. And, Fung does not
teach or suggest multiple power modes for link circuits of ports.

In response, the Examiner asserts that Fung does teach a first port (see [0031]

regarding input/output ports for each server) comprising a first link circuit to couple to

the first device (a first server) and a second port (see [0031] regarding input/output

ports) comprising a second link circuit to couple to the second device (a second server)

as claimed (see Figs. 1, 13), and would teach global controller and local controller as

claimed (see Figs. 9-11 and [0156, 0157, 0186, 0187 and [0193-0199]). Since each

server would comprise an input/output port, and each server would operate in a

suspense or resume mode, it is clear that Fung does teach or suggest multiple power

modes (suspense or resume) for link circuits of ports (circuits related to transmit/receive

a message).

Applicant further contends that

With regards to claim 36, the combination of Fung and Zeitler does not teach or suggest
"a global link circuit.., to transmit a control signal to ports.., to configure link circuits of the
ports."

Fung does not teach or suggest reconfiguration of link circuits. Fung does not teach or
suggest reconfiguration of link circuits of ports of multiple links between an origin and a
destination. Fung does not teach or suggest transmission of a control signal being indicative of
at least one **characteristic of the data transmission** to configure link circuits of the ports. And,
Fung does not teach or suggest transmission of a control signal for the link circuits of the ports. Zeitler

fails to compensate for the inadequacies of Fung. For instance, Zeitler does not teach or suggest power

modes for links and Zeitler does not teach or suggest link circuits to reconfigure links in response to a

control signal. Thus, Applicant respectfully traverses the rejection of claim 25 and requests that the

rejection be withdrawn.

In response, the Examiner asserts that the **activity** in Fung would read on at

least one characteristic of the data transmission, and that a power management signal

for controlling a server whether to operate in a suspense or resume power mode would

read on "a global link control to configure the first (or second) link circuit to operate in a

first (or second) power mode of multiple power modes associated with the first link

circuit based upon the control signal, wherein the control signal is associated with at

least one characteristic of the data transmission and the first (or second) power mode is

associated with the at least one characteristic" as claimed (see Figs. 9-11, 15-23 and

[0156, 0157, 0186, 0187] and [0193-0199]);

Applicant further contends that

With regards to claim 23, the combination of Fung, Zeitler, and Bui U.S. Pat. 7,047,428
(hereinafter "Bui") does not teach or suggest "...communicating the power mode to the multiple
links to configure circuitry associated with the multiple links to process the data transmission."

As cited in the Office action, Bui describes an integrated circuit that detects when a mode
of operation is not being used and puts the associated logic of the integrated circuit to sleep.
When integrated circuit 300 detects that one mode of operation is not being used,
it proceeds to put the logic associated with that transceiver to sleep as shown at
402. This may mean decoupling or disconnecting the 10BASE-T functionality,
the 100BASE-T functionality or the 1000BASE-T functionality ....
However, Bui fails to compensate for the inadequacies of the combination of Fung and Zeitler. Bui does
not teach or suggest "communicating the power mode to the multiple links [between an origin and a
destination for a data transmission] to process the data transmission."

In response, the Examiner asserts that Bui's reference is used solely for it's

teaching of a gain and equalization circuit that would obviously included in a transceiver

circuit in Fung, where Fung does teach "communicating the power mode to the multiple

links to process the data transmission" as set forth in claim 18 above.

As to dependent claims, since the claims rely on the patentability of independent

claims 18, 25, 36, the same response would be applied for the same reason as set forth

above. Further, Applicant is directed to the previous Office Action's rejections for more details how the claims read on the cited prior art.

For foregoing reasons, the examiner believes that the pending claims are not allowable over the cited prior art.

2.   **Any response to this action should be mailed to:**

Box A.F.

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(571) 273-8300 (for **formal** communications intended for entry)

(571)-273-7893 (for informal or **draft** communications).

Hand-delivered responses should be brought to Customer Service Window, Randolph Building, 401 Dulany Street, Alexandria, VA 22314.

Any inquiry concerning this communication or communications from the examiner should be directed to Duc M. Nguyen whose telephone number is (571) 272-7893, Monday-Thursday (9:00 AM - 5:00 PM).

Or to Matthew Anderson (Supervisor) whose telephone number is (571) 272-4177.

Duc M. Nguyen, P.E.

Aug 17, 2007